

REMARKS

Claims 8-14 and 16-17 are all the claims pending in the application. By this Amendment, Applicant amends claim 8 to further clarify the invention.

Summary of the Office Action

The Examiner maintained the rejection of claims 8-14, 16, and 17 under 35 U.S.C. § 103.

Prior Art Rejection and Statement of Substance of Interview

Claims 8-14, 16, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,041,358 to Huang et al. (hereinafter “Huang”) in view of the publication Bruce Boyes, “Hard real-time connectivity: It’s in the CAN” COMPUTER DESIGN, January 1997, Internet <http://www.computer-design.com/editorial/1997/embedded/197emcan.html> (hereinafter “Boyes”)¹. Applicant respectfully traverses these grounds of rejection in view of at least the following comments.

Applicant thanks the Examiner Chang for the courteous telephonic interview on June 27, 2007. An Examiner’s Interview Summary Record (PTO-413) was mailed to the Applicant’s Representatives on July 9, 2007. The PTO-413 requires Applicant to file a Statement of Substance of the Interview. The Statement of Substance of the Interview is as follows:

During the interview independent claim 8 was discussed. Specifically, independent claim 8 recites: “administering by a central entity (CAN Object Identifier Server) a freely definable number of usable CAN (Controller Area Network) object identifiers; and upon request by a

¹ Cited by Applicant in Information Disclosure Statement filed December 5, 2001.

communication node ready for sending Ethernet frames to a receiving communication node, assigning by the central entity (CAN Object Identifier Server) said pair of communicating nodes a pair out of said CAN (Controller Area Network) object identifiers.”

In an exemplary, non-limiting embodiment of the present invention, communication of Ethernet frames between two nodes via a CAN bus is enabled by assigning a pair of CAN object identifiers to a pair of nodes. The pair of CAN object identifiers is taken from a centrally administered finite number of freely definable CAN object identifiers. That is, the number of usable CAN object identifiers is not bound to the number of nodes or node addresses. Instead, the central entity assigns a pair out of the freely defined number of CAN object identifiers to each pair of communicating nodes between which Ethernet frames will be transmitted. Accordingly, transmission of the Ethernet frames via a transmission protocol other than the Ethernet standard protocol is made possible (¶ 40 of the specification).

In an exemplary embodiment, pair of CAN object identifiers does not give the addresses of the communicating nodes (sender and receiver) but *identifies the communication link* from the sender to the receiver. For another communication link from another sender to the same receiver, the receiver will get another different CAN object identifier allocated. In short, the CAN object identifiers are not statically allocated to the respective communication nodes but identify the communication link from a sender to a receiver, and are therefore dynamically allocated to the communication nodes upon request of the communication node ready for sending. In other words, upon request by a communication node ready for sending Ethernet frames to a receiving communication node, the central entity (CAN Object Identifier Server)

assigns a pair of communicating nodes a pair out of said CAN (Controller Area Network) object identifiers.

It will be appreciated that the foregoing remarks relate to the invention in a general sense, the remarks are not necessarily limitative of any claims and are intended only to help the Examiner better understand the distinguishing aspects of the claim mentioned above.

Huang discloses that when node MT1 of the first VLAN1 desires to communicate with node s4 of the second node VLAN2, the node MT1 transmits an address resolution protocol (ARP) request packet containing the IP address of the destination node s4 to the LES1. The LES1 transmits the ARP packet to other LESs, including the LES2. The LES2 maintains an address translation table for translating IP addresses of each of its connected nodes to data-link layer addresses. The LES2 responds to the ARP packet by transmitting a reply packet to the LES1 containing the IP address to data-link layer address translation for the node s4. In this case, the translation may consist of the ATM address of the bridge b2. The LES1 then transmits the reply packet to BS1. The node BS1 then sets up a VCC with the node b1. Thereafter, the packets can be transmitted from the node MT1 to the node BS1 to the ATM communications network to the node b2 and then to the node s4 (Fig. 1; col. 3, lines 36 to 55).

In other words, Huang relates to the ATM LAN emulation. In Huang, the central entity LES1 maintains a lookup table containing the MAC addresses and corresponding ATM addresses of all nodes of the emulated LAN. The table maps MAC addresses to ATM addresses. That is, Huang fails to disclose or suggest the central entity administering a freely definable number of usable CAN object identifiers. In Huang, the number of usable CAN object identifiers are bound to the number of nodes or node addresses and as such are not freely

definable. In Huang, there is a mapping of MAC addresses to the ATM address. In short, Huang fails to disclose or suggest the central entity assigning a pair out of the freely defined number of CAN object identifiers to each pair of communicating nodes between which Ethernet frames will be transmitted.

Furthermore, in Huang, the ATM address (alleged CAN object identifier) is a static address of the network node and does not dynamically identifies the communication link from the sender to the receiver. In Huang, for another communication link from another sender to the same receiver, the receiver will not obtain a new ATM address. That is, Huang discloses statically allocated ATM addresses to the respective communication nodes but not identifying the communication link from a sender to a receiver. In other words, Huang does not disclose or suggest dynamically allocating to the communication nodes identifiers upon request of the communication node ready for sending. In short, Huang does not disclose or suggest assigning the identifiers upon request of communication node ready for sending Ethernet frames to a receiving communication node.

Boyes is only cited for its disclosure of the CAN protocol and does not cure the deficient disclosure of Huang.

The Examiner indicated that claim 1 as now amended requires further search and consideration. The Examiner further indicated that claims 16 and 17 require further consideration. Accordingly, the Examiner agreed to carefully review the above-identified application and contact the Applicant's Representative to discuss claim 1 in detail in the week of July 2, 2007. The Examiner, however, never contacted Applicant's Representatives and

numerous attempts to reach the Examiner have been unsuccessful. Applicant's Representatives were later informed by the Supervisory Examiner that the Examiner left the USPTO.

It is respectfully submitted that the instant STATEMENT OF SUBSTANCE OF INTERVIEW complies with the requirements of 37 C.F.R. §§1.2 and 1.133 and MPEP §713.04. **It is believed that no petition or fee is required.** However, if the USPTO deems otherwise, Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

In view of the above-provided remarks, claim 8 is patentable over Huang in view of Boyes. Accordingly, Applicant respectfully requests the Examiner to withdraw this rejection of claim 8 and its dependent claims 9-14 and 16 and 17.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. **If any points remain in issue, the new Examiner handling the above-identified application is kindly requested to contact the undersigned attorney at the telephone number listed below to schedule an Interview.**

AMENDMENT UNDER 37 C.F.R. § 1.116 AND
STATEMENT OF SUBSTANCE OF INTERVIEW
Application No.: 09/935,573
Attorney Docket No.: Q65540

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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